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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.												
10/622,668	07/21/2003	Yasuhiro Yoshioka	FSF-031391	3824												
37398 TAIYO CORPORATION 401 HOLLAND LANE #407 ALEXANDRIA, VA 22314	7590 10/09/2007		<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">CHEA, THORL</td></tr></table> <table border="1"><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>1795</td><td></td></tr></table> <table border="1"><tr><td>MAIL DATE</td><td>DELIVERY MODE</td></tr><tr><td>10/09/2007</td><td>PAPER</td></tr></table>		EXAMINER		CHEA, THORL		ART UNIT	PAPER NUMBER	1795		MAIL DATE	DELIVERY MODE	10/09/2007	PAPER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/622,668	Applicant(s) YOSHIOKA ET AL.	
	Examiner Thorl Chea	Art Unit 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,7,9,11 and 13-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,7,9,11 and 13-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received:

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20070801</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responsive to the amendment and RCE on August 31, 2007; Claims 1, 5, 7, 9, 11, 13-19 are pending in this instant application; claims 2-4, 6, 8, 10 and 12 have been canceled.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 31, 2007 has been entered.

Priority

3. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 09/695,864, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. In this case, the prior-filed application, Application

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No. 09/695,864 fails to provide support for the claimed invention. See the language in claims 1, 3, 5, 7, 9, 11, 13-17 in view of the prior-filed application.

See MPEP 2233.1 "when applicant files a continuation-in-part whose claims are not supported by the parent application, the effective date is the filing date of the child CIP. Any prior art disclosing the invention or an obvious variant thereof having a critical reference date more than 1 year prior to the filing date of the child will bear the issuance of a patent under 35 USC 102(b). *Paperless Accounting v. Bay Area Rapid Transit system*, 804 F. 2d 659, 665, 231 USPQ 649, 653 (Fed. Cir. 1986).".

In this case, the prior-filed application fails to provide support for the combination of the compound of formula R1 for a dye and R2 which form a dye claimed in the present claimed invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 5, 7, 9, 11, 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 10096310 (EP'310).

The EP'310 discloses a photothermographic material substantially as claimed. The photothermographic material contains one or more bisphenols compound having formula encompass the scope of formula (R1) and (R2) of the present claimed invention. See the generic phenol compound on page 3, [0013], compound (I) and the description of -L- and R1 to R8 on

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page 5 such as L is $-\text{CHR}^9-$, R9 is hydrogen or alkyl; R1, R8 represent secondary alkyl group or a tertiary alkyl group; R2, R4, R5, R7 represent hydrogen, halogen, or an alkyl group, more preferably hydrogen; R1, R3, R6, R8 represent an alkyl group, more preferably, a primary group having 1-20 carbon atoms, a secondary alkyl group having 3-20 carbon atoms, or tertiary group having 4-20 carbon atom, and the substituent thereof includes alkoxy group, aryloxy group, hydroxyl group, acyloxy group, amino group, heterocyclic group. The compound of formula (I) is exemplified on page 7, compound (I-6), wherein a tertiary alkyl as R1 and R8; an alkyl having 4 carbon atoms as R3 and R6; and an alkyl group ($-\text{CH}_3$) associated with L. This compound is within the scope of formula (R1) of the present invention. The compound of formula (I-4), (I-9) or (I-10) are within the scope of formula (R2) of the present claimed invention. On page 5, [0034] to [0037], it is disclosed that "preferably R1 and R8 independently represent a secondary alkyl group or a tertiary alkyl group. If a secondary alkyl group or tertiary alkyl group is selected, coating amount can be markedly reduced, and hence the production cost of the photothermographic material and labors may be markedly reduced. Further, if secondary alkyl group or tertiary alkyl group is selected, image storability is extremely degraded, unless a compound having a phosphoryl group is used in combination. However, by using them in combination according to the present invention, the image storability is markedly improved. In view of development activity, tertiary alkyl groups are preferred as R1 and R8. While R1 and R8 may be identical or different, they are preferably identical to each other. R3 and R6, unsubstituted alkyl groups are preferred. Specific example includes methyl group, ethyl group, propyl group, butyl group t-butyl group, t-amyl group, cyclohexyl group, 1-methylcyclohexyl group and so forth. More preferred are methyl group, ethyl group, isopropyl group and t-butyl

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group, and most preferred are methyl group and ethyl group. Preferably, R2, R4, R5 and R7 independently a hydrogen atom, a halogen atom or an alkyl group, more preferably hydrogen group. L represent a group -S- or a group -CHR9- where R9 represent a hydrogen or alkyl group. See the other additive such as compound having phosphoryl group on pages 20-34; the halogenated compound on pages 60, [0242], [0243]; the amount of reducing agent on pages 11, [0039], [0040]; the amount of silver salt on page 35, [0074]; the toning agent and the ultrahigh contrast developer on page 41; the hydrazine derivative on page 49, [0167], [0168]; and time and temperature processing on page 53, [0210].

EP'310 discloses the use of one or more "o-polyphenol compound", and herein the "o-polyphenol compound" taught therein encompasses the scope of the compound of formula (R1) and (R2) claimed in the present claimed invention. The compound has different activity accordingly to the substituent associated therein. See for instance the compound having tertiary alkyl groups in R1 and R8 is used for development activity. Therefore, It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use one or more compound within the scope of formula (I) of EP'310 with an expectation of achieving a highly useful material with sufficient image density and image storage stability.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 10096310 (EP'310) as applied to claims 1, 3, 5, 7, 9, 11, 13-17 above, and further in view of Oya et al (US 2001/0051319A1).

Oya et al discloses the compound within the scope of formula (A-2) in claim 7 as development accelerator of a photothermographic material. See compound of formula (2) in the abstract. It would have been obvious to the worker of ordinary skill in the art at the time the invention was

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made to use the phenol compound taught in Oya et al as development accelerator for the material of EP'310, and thereby provide a material as claimed.

Response to Arguments

7. Applicant's arguments filed August 31, 2007 have been fully considered but they are not persuasive because of the reason set forth in the above rejection, and the response to the argument in the Final Office Action on May 2, 2007. EP'310 disclose the use of one or more bisphenols compounds in page 4, [0022]. The compound I-6 is within the scope of the claimed compound R-1 and the compounds I-4, I-9, and I-13 is within the scope of the compound (R2) when the $-R_{24}$ of the compound (R2) is a hydrogen atom. The amount of phenol taught in EP'310 is from 0.01-4.0 g/m², and with respect to one mole of silver on the surface having an image forming layer, it is preferably 2-40 mole %, more preferably 5-30 mole %. See page 11, [0040]. This amount of bisphenols compound is within the amount shown in the present specification disclosure on page 18, first paragraph. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use one or more bisphenols compound within the amount disclosed in EP'310 with an expectation of achieving a material that can provide sufficient density at reaction temperature with reaction time, and can suppress coloration of blank portions during storage in the dark after development.

The applicants further rely on the Declaration under 37 CFR 1.132 on August 31, 2007 to obviate the prima facie case of obviousness rejection. It was argue that the photothermographic material contains 5 % to 40 % by mole relative to the total amount of the reducing agent provide a material showing an unexpected results.

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The Declaration under 37 CFR 1.132 on August 31, 2007 fails to obviate the prima facie case of obviousness rejection set forth above. The samples were made accordingly to the sample 008 of example 1 shown in the specification of the present invention which contains a variety of additives which is presented in the claimed invention such as the additive shown on page 126 including silver behenate, polyhalogen compound, phthalazine compound, development accelerator, tone adjustment agent and mercapto compound and so on. The material claimed in the present invention contains any type of silver halide, a non-photosensitive organic silver salt, binder and reducing agent of formula (R1) and (R2). Therefore, the material shown in the Declaration is not commensurate with the scope of the claimed, and would not produce the results shown therein. Moreover, the results shown in the Declaration are based on less than 10 human observations using naked eyes, which are not accurate or biased to be used in determining the unexpected results. A more scientific numeric data are required and a significant difference in results between the comparative samples should be provided.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea
2007-09-25



Thorl Chea
Primary Examiner
Art Unit 1752